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EXAMINER

JEAN GILLES, JUDE

ART UNIT PAPER NUMBER

2143

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,563

Applicant(s)

HAMILTON ET AL.

Examiner

Jude J. Jean-Gilles

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Action is in regards to the Reply received on 03 January, 2005.

Response to Amendment

1. This action is responsive the reconsideration request made to the application filed on January 3th, 2005. By this amendment, claims 1-16 have been cancelled and new claims 17-40 have been added in the case for consideration. Therefore, claims 17-40 are currently pending, and represent a method and an system for "to provide direct access within a notebook computer via a wireless interconnect and a low power high-speed data management bus while the main CPU is idle".

Response to Arguments

2. Applicant's arguments with respect to claims 17, 27, 33 and 38 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new ground of rejection as explained here below, necessitated by Applicant substantial amendment (i.e., a method to activate an idle storage device in a computer system to transfer data while a main processor of the computer is idle...) to the claims which significantly affected the scope thereof. The dependent claims stand rejected as articulated in the First Office Action and all objections not addressed in Applicant's response are herein reiterated.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang et al (Zhang) U.S. Patent No. 6,829,704 B2 in view of Crump et al (Crump) U.S. Patent No. 5,530,879.

Regarding claim 17: Zhang discloses the invention substantially as claimed.

Zhang teaches a method, comprising:

activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle (column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46);

executing the data transfer (column 5, lines 54-67; column 6, lines 1-30);

However, Zhang does not teach returning system resources to an idle state.

In the same field of endeavor, crump discloses "a computer system that that returns to a suspend or idle state following a normal operating state...." [see Crump, column 14, lines 28-62].

It would have been obvious for an ordinary skill in the art at the time of the invention to incorporate the step of returning to an idle state of Crump with Zhang for the purpose of providing a method and a system to automatically activate options resident in memory of a ...to prevent automatic installation of options during device

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operation as stated by Zhang in lines 24-28 of column 2. By this rationale, **claim 17** is rejected.

Regarding claim 18: The combination Zhang-Crump discloses the method of claim 17, further comprising:

buffering the data for transfer [see Crump, column 40, lines 51-67; column 41, lines 23]. The same motivation used for the rejection of claim 17 is valid for claim 18 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 18** is rejected.

Regarding claim 19: The combination Zhang-Crump discloses the method of claim 17, further comprising:

detecting a request for data transfer to activate the idle storage device while the main processor of the computer is idle [see Zhang, column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46]. The same motivation used for the rejection of claim 17 is valid for claim 19 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 19** is rejected.

Regarding claim 20: The combination Zhang-Crump discloses the method of claim 19, wherein a controller activates the idle storage device by directing power to the device [see Crump, column 10, lines 34-45]. The same motivation used for the rejection of claim 17 is valid for claim 20 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 20** is rejected.

Regarding claim 21: The combination Zhang-Crump discloses the method of claim 17, further comprising:

tagging the transferred data for recognition [see Crump, column 41, lines 62-67; column 42, lines 1-18]. The same motivation used for the rejection of claim 17 is valid for claim 21 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 21** is rejected.

Regarding claim 22: The combination Zhang-Crump discloses the method of claim 17, further comprising:

apportioning a system time and power resource based on the transferred data [see Crump, column 41, lines 62-67; column 42, lines 1-18]. The same motivation used for the rejection of claim 17 is valid for claim 22 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 22** is rejected.

Regarding claim 23: The combination Zhang-Crump discloses the method of claim 22, further comprising:

returning the system resource to a pre-transfer state [see Crump, column 14, lines 28-62]. The same motivation used for the rejection of claim 17 is valid for claim 23 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 23** is rejected.

Regarding claim 24: The combination Zhang-Crump discloses the method of claim 17, further comprising:

notifying a user of the computer system of the data transfer after the system is returned to an idle state [see Zhang, column 8, lines 3-32]. The same motivation used for the rejection of claim 17 is valid for claim 24 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 24** is rejected.

Regarding claim 25: The combination Zhang-Crump discloses the method of claim 17, wherein the data is transferred wirelessly [see Zhang, column 6, lines 18-30].

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The same motivation used for the rejection of claim 17 is valid for claim 25 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 25** is rejected.

Regarding claim 26: The combination Zhang-Crump discloses the method of claim 17, wherein the data is transferred via a low level data bus [see Crump, column 8, lines 26-48]. The same motivation used for the rejection of claim 17 is valid for claim 26 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 26** is rejected.

Regarding claim 27: The combination Zhang-Crump discloses an apparatus comprising:

means for activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle [see Zhang; column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46];

means for executing the data transfer [column 5, lines 54-67; column 6, lines 1-30]; and

means for returning system resources to an idle state [see Crump, column 14, lines 28-62]. The same motivation used for the rejection of claim 17 is valid for claim 27 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 27** is rejected.

Regarding claim 28: The combination Zhang-Crump discloses the apparatus of claim 27, further comprising:

means for buffering the data for transfer [see Crump, column 40, lines 51-67; column 41, lines 23]. The same motivation used for the rejection of claim 17 is valid for claim 28 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 28** is rejected.

Regarding claim 29: The combination Zhang-Crump discloses the apparatus of claim 27, wherein the means for activating the idle storage device comprise a controller that detects a request for data transfer while the main processor of the computer is idle [see Zhang, column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46]. The same motivation used for the rejection of claim 17 is valid for claim 29 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 29** is rejected.

Regarding claim 30: The combination Zhang-Crump discloses the apparatus of claim 29, wherein the controller activates the idle storage device by directing power to the device [see Crump, column 10, lines 34-45]. The same motivation used for the rejection of claim 17 is valid for claim 30 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 30** is rejected.

Regarding claim 31: The combination Zhang-Crump discloses the apparatus of claim 27, wherein the data is transferred wirelessly [see Zhang, column 6, lines 18-30]. The same motivation used for the rejection of claim 17 is valid for claim 31 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 31** is rejected.

Regarding claim 32: The combination Zhang-Crump discloses the apparatus of claim 27, wherein the data is transferred via a low level data bus [see Crump, column 8, lines 26-48]. The same motivation used for the rejection of claim 17 is valid for claim 32 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 32** is rejected.

Regarding claim 33: The combination Zhang-Crump discloses a machine-readable medium having executable instructions to cause a processor to perform a method, the method comprising:

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activating an idle storage device in a computer system to transfer data while a main processor of the computer is idle [see Zhang; column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46];

executing the data transfer [see Crump, column 14, lines 28-62]; and

returning system resources to an idle state [see Crump, column 40, lines 51-67].

The same motivation used for the rejection of claim 17 is valid for claim 33 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 33** is rejected.

Regarding claim 34: The combination Zhang-Crump discloses the machine-readable medium of claim 33, wherein the method further comprises:

Buffering the data for transfer [see Crump, column 40, lines 51-67; column 41, lines 23]. The same motivation used for the rejection of claim 17 is valid for claim 34 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 34** is rejected.

Regarding claim 35: The combination Zhang-Crump discloses the machine-readable medium of claim 34, wherein the idle storage device is activated by a controller that detects a request for data transfer while the main processor of the computer is idle [see Zhang, column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46]. The same motivation used for the rejection of claim 17 is valid for claim 35 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 35** is rejected.

Regarding claim 36: The combination Zhang-Crump discloses the machine-readable medium of claim 33, wherein the method further comprises;

apportioning a system resource based on the transferred data [see Crump, column 41, lines 62-67; column 42, lines 1-18]. The same motivation used for the

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rejection of claim 17 is valid for claim 36 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 36** is rejected.

Regarding claim 37: The combination Zhang-Crump discloses the machine-readable medium of claim 36, wherein the method further comprises:

returning the system resource to a pre-transfer state [see Crump, column 14, lines 28-62]. The same motivation used for the rejection of claim 17 is valid for claim 37 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 37** is rejected.

Regarding claim 38: The combination Zhang-Crump discloses a computer system comprising:

a processor coupled to a memory through a bus [see Crump; fig. 3A-B, items 40-53];

a unit to activate a storage device in a computer system to transfer data while the processor is idle, the unit to [see Zhang; column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46]

execute the data transfer, [see Crump, column 14, lines 28-62] and the unit to

return system resources to an idle state [see Crump, column 40, lines 51-67].

The same motivation used for the rejection of claim 17 is valid for claim 38 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 38** is rejected.

Regarding claim 39: The combination Zhang-Crump discloses the system of claim 38, further including a buffer to store data to be transferred [see Crump, column 40, lines 51-67; column 41, lines 23]. The same motivation used for the rejection of

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claim 17 is valid for claim 39 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 39** is rejected.

Regarding claim 40: The combination Zhang-Crump discloses the system of claim 38, further including a unit to detect a request for data transfer to activate the idle storage device while the main processor of the computer is idle [see Zhang, column 2, lines 51-67; column 3, lines 1-5; column 9, lines 1-46]. The same motivation used for the rejection of claim 17 is valid for claim 40 [see Zhang, column 2, lines 24-28]. By this rationale, **claim 40** is rejected.

Response to Arguments

5. Applicant's Request for Reconsideration filed on January 3rd, 2005 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention.

Applicants contend that in particular, the new independent claims 17, 27 and 33 are not anticipated by Jiang, because Jiang does not disclose returning the device to an idle state after data delivery, and that the newly added claims are patentable for that the references used in the first Office action do not disclose the limitations of the new claims.

6. It is the position of the examiner that the new reference by Zhang is used in combination with Crump to reject the new claims under 35 USC § 103 [see rejection above].

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3719.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

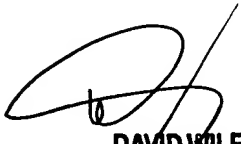
Jude Jean-Gilles

Patent Examiner

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JJG

June 23, 2005



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